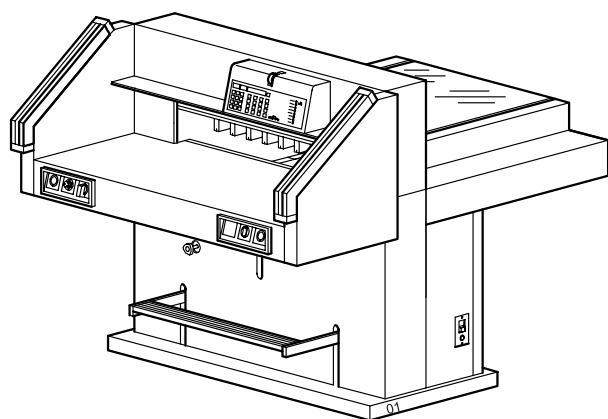


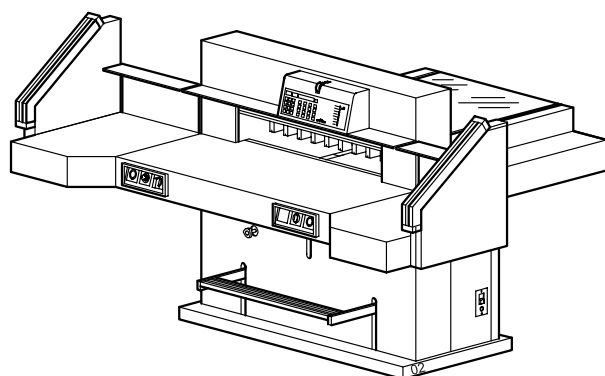


Table of contents

1. General	4
1.1 Safety Instructions	4
1.2 Application	4
2. Installation	5
2.1 Preparing for Installation	5
2.2 Power supply	6
3. Operation	7
Checklist	7
3.1 Operating elements	8
3.2 Start-up	8
Display in cm or inch	8
Manual Foot pedal	8
Cutting to a specific size	8
Calculating	9
Cut according to markings	9
Optical cutting line indicator	9
Mechanical cutting line indicator	9
Eject function	9
Multiple cuts function start	9
Exiting program-mode	9
Cutting stop or interruption	10
3.3 Cutting activation	10
3.4 False clamp plate	11
3.5 Programming	12
Program entry	12
Eject function	12
Select Program	13
Insert a step	13
Delete a step	13
Delete a program	13
Example of a program	13
How the example works	13
Working with programs	14
Exiting program-mode	14
4. Maintenance	15
4.1 Cutting stick	15
Setting the cutting depth	15
Turning or replacing the cutting stick	16
Cutting test	16
4.2 Blade replacement	17
Removing the blade	17
Blade mounting	18
4.3 Weekly Maintenance	19
4.4 Monthly Maintenance	19
Type of grease	19
5. Malfunctions	20
6. Technical data	22
7. Accessories	22
EG-declaration of conformity	23



without side tables



with side tables

1. General

This instruction manual will help you to learn the safe and comfortable operation of this machine. Please read these operating instructions before putting the machine into operation and observe the safety regulations.

1.1 Safety Instructions



Danger!

Non-compliance with the instructions may endanger persons.



Warning!

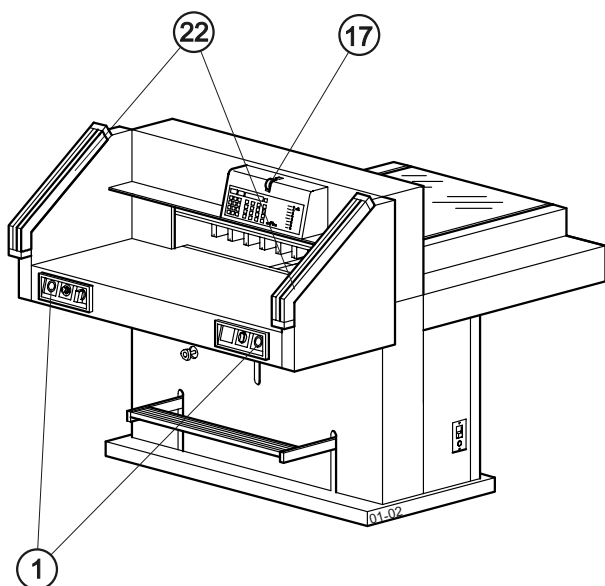
Non-compliance with the instructions may cause damage to the machine.

The operating instructions must always be available for the operator.

All components which may endanger the operator are covered by a guard. The casing is connected (screwed) to the machine.

Operation by one person at a time only.

The cutting action, which is dangerous to the operator, is protected by a two-handed control system (22) and safety beam guard (1).



1.2 Application

The machine is designed for cutting stacks of paper to a specified size. Setting the measurement is done via buttons or hand wheel (17). Cutting cycle is activated by a two-handed control system.



Danger!

Only instructed persons are allowed to operate the machine.

No operation by children.



Danger!

Do not cut any hard material or material liable to chip.



Danger!

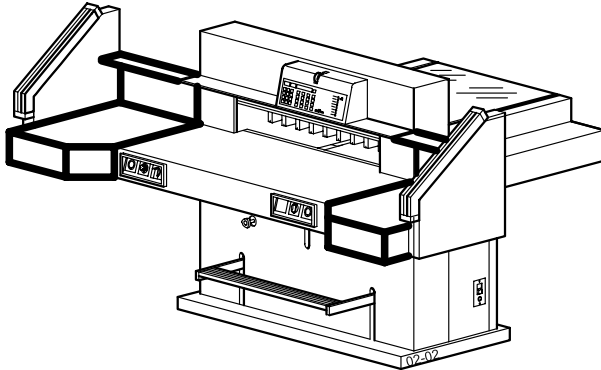
Paper cutting machines are meant exclusively for the cutting of paper or similar material. Paper clips or hard material will damage the cutting blade.

2. Installation

- Transport the machine on the pallet to its destination using a pallet-jack.
- 6 strong people are required to lift the machine from the pallet.
- The machine should be installed on a sturdy, dry and level floor.

Danger!

- The machine must not be located outside.
- Do not use in the vicinity of inflammable liquids or gases.
- Do not use in humid environments.
- Protect mains cable against heat, oil and sharp edges.



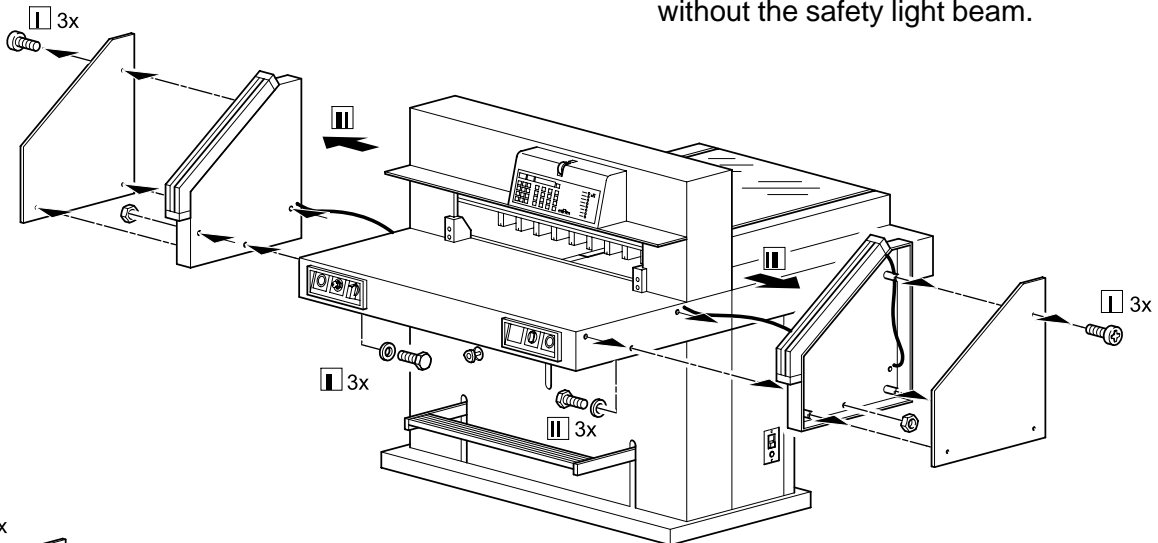
2.1 Preparing for Installation

The machine is delivered ready for operation. As an option, side tables, left and right, are available. These should be mounted so that the surfaces are level with the main table.

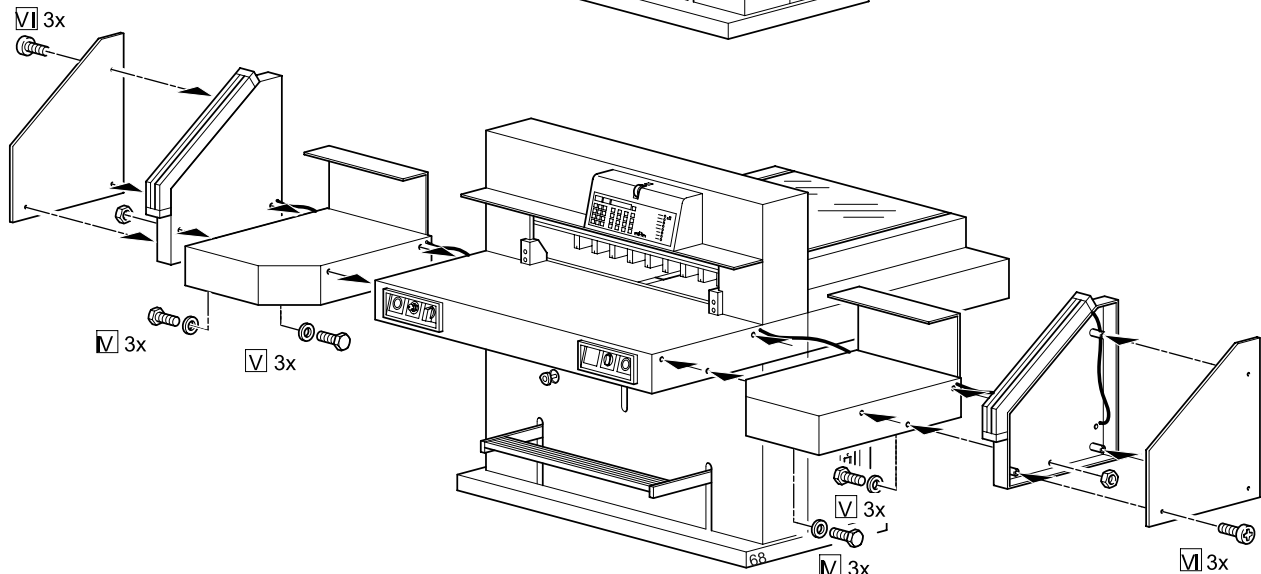
Danger!

The machine must not be put into operation without the safety light beam.

1.)



2.)



2.2 Power supply

The name plate (23) is located at the rear of the machine.

- Data stated on the name plate
 - Voltage "V",
 - Frequency "Hz",
 - Power consumption "A"
 must correspond to the values of the power supply unit.
- Connect the machine to the mains.
- **Earth wire must be available.**

Standard machines are factory-set as follows:

- Voltage 400V (220V) 3 phase
- Frequency 50Hz (60Hz).

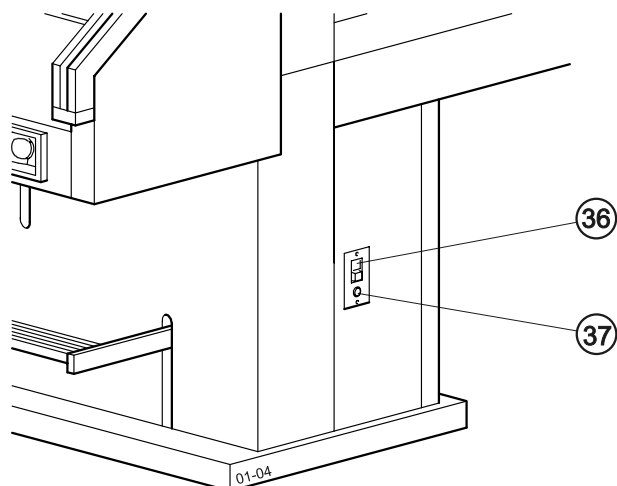
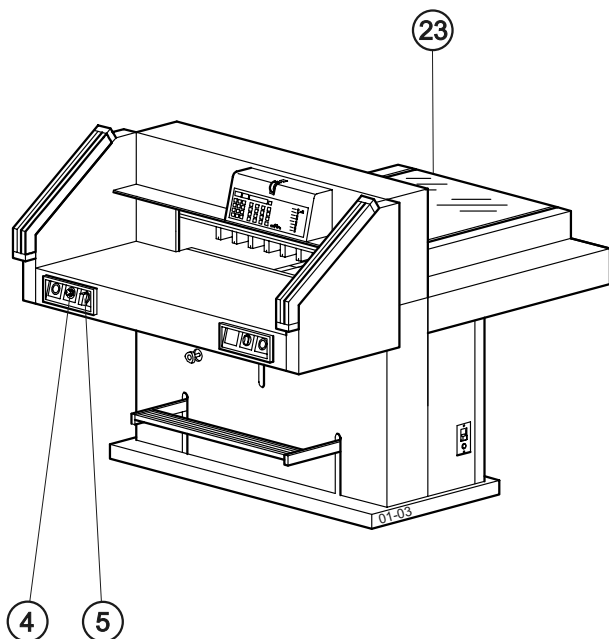
Machine does not function

- Switch (5) ON.
 - Key-switch (4) ON.
 - Check on-site fuse.
 - Press the green overload switch (36).
 - Press the black overload switch (37).
- If the machine still does not function then the rotation must be reversed.

The machine is wired according to the IEC standards. We recommend that alterations to the rotary direction be made in the socket. It is also possible to make alterations in the plug by exchanging „L1“ and „L2“.

⚠ Danger!

Incorrect exchanging of the connections will endanger the operator. This work must be carried out by an electrician.



3. Operation



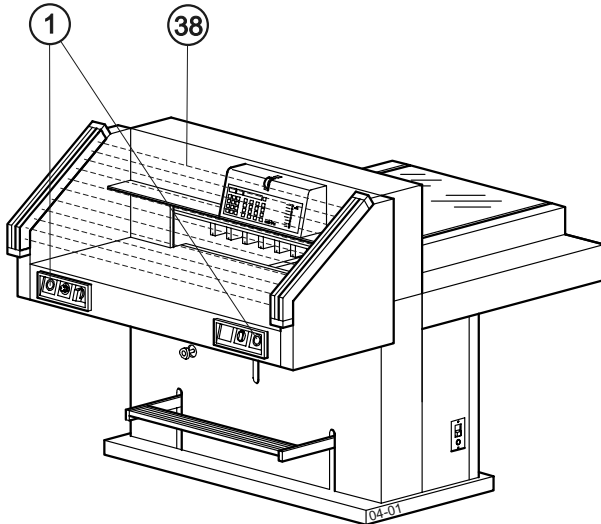
Danger!

The machine may only be operated by trained persons who have also read and understood the operating and safety instructions.



Danger!

Check safety devices are complete and function prior to starting the machine and after replacing the blade.

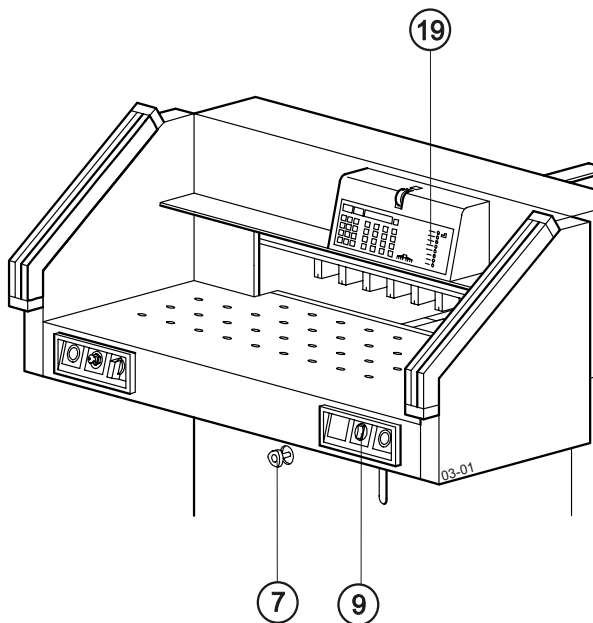


Checklist

- Machine panels:
All panels must be mounted
- Cutting activation:
The cutting mechanism starts when the „two-handed control system“ (1) is pressed exactly at the same time.
- Safety light beam
Do not reach into the cutting area (38) when in motion.

It is recommended to keep a written copy of the examination results.

Cutting sequence (1) with automatic clamping:



Airtable (9)



The airtable allows paper to be easily positioned.

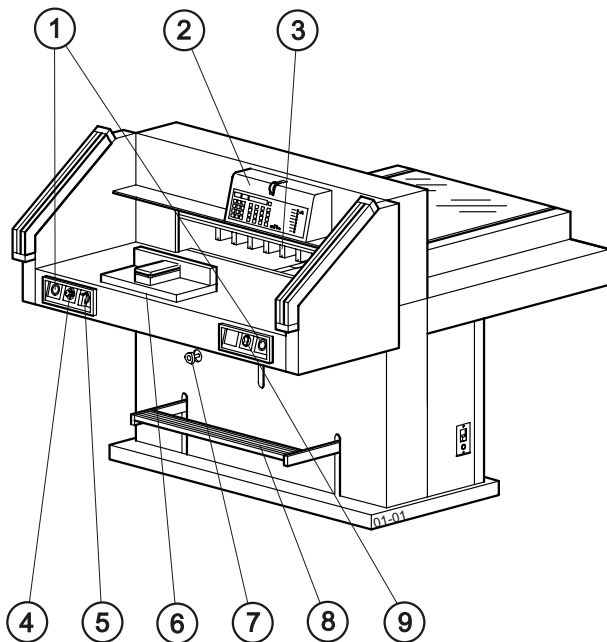
Setting clamping pressure (7)



The clamp pressure can be adjusted using the adjustment knob (7).

→ The clamping pressure can be read on the light panel (19).

3.1 Operating elements



- (1) Safety two-handed control system
- (2) Backgauge control
- (3) Backgauge
- (4) Key switch
- (5) Main switch
- (6) Knocking-up block
- (7) Clamp pressure adjustment
- (8) Foot pedal
- (9) Airtable switch
- (10) Program number
- (11) Program step
- (12) LED „M“ Display Memory
- (13) LED „E“ Display Eject
- (14) LED „S“ Display Error indication
- (15) Display Cutting size
- (16) Backgauge, backwards fast
- (17) Electronical handwheel for fine adjustment
- (18) Backgauge, forwards fast
- (19) Clamp pressure
- (20) Switch-over cm - inch.
- (21) Keypad

3.2 Start-up

- Turn the main switch (5) to position „I“.
- Insert the key (4) for the control panel and turn to the right.
- Press **[Start]** key. → Backgauge (3) will automatically search for the reference point. The measurement appears on the display.

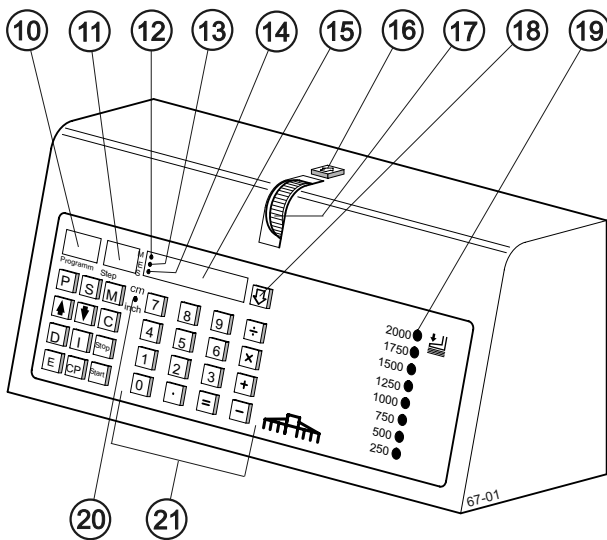
Display in cm or inch

Press **[cm-inch]** → Display changes from cm and inch.

- cm = 4-digit display
- inch = 5-digit display

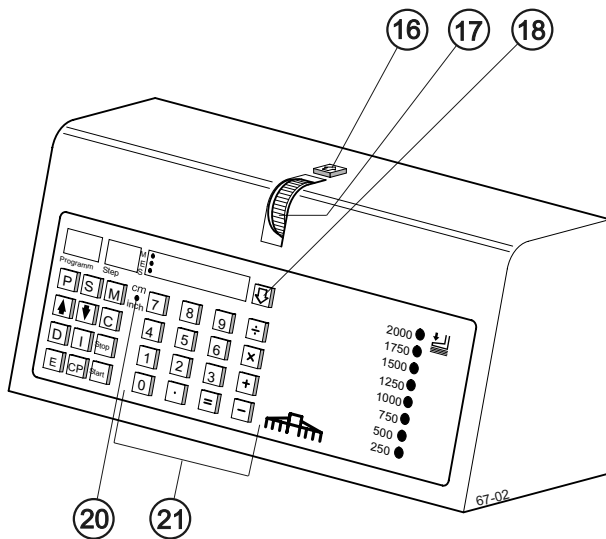
Manual Foot pedal

Pre-clamping can be performed using the foot pedal (8) (e.g. folded stacks).



Cutting to a specific size

- Enter the cut size on the display → the red „S“ (14) light will be on.
- Press **[Start]** key → size is approached, LED „S“ is deleted.
- Insert the paper and push it with the knocking-up block to the backgauge (6).
- Release the cut.



Calculating:

e.g. $\boxed{4} \boxed{8} \boxed{:} \boxed{4} \boxed{\text{Start}}$ → Backgauge advances to the calculated measurement.

Cut according to markings

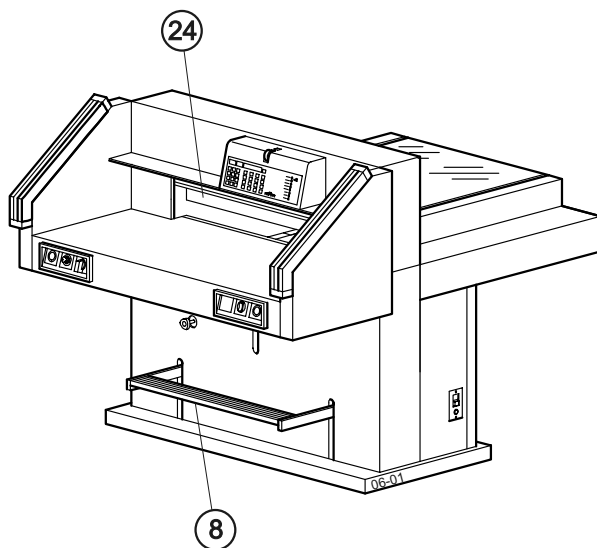
- Position the backgauge (16) to the back.
- Insert the paper and push it with the knocking-up block to the backgauge.
- Turn rotary control (17) to the front until the marking on the paper to be cut is under the light beam. The more the rotary control is turned the faster the backgauge will move. For quick motion use key (18).
- Release the cut.

Optical cutting line indicator

An optical cutting line indicator is used for exact cutting. The light beam indicates where the cut will be made.

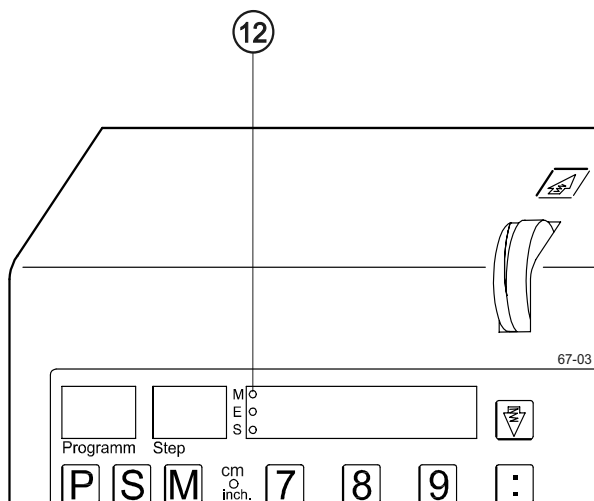
Mechanical cutting line indicator

The clamp (24) can be used as cutting line indicator for exact cutting. Pre-clamping can be performed using the foot pedal (8).



Eject function

If key \boxed{E} is pressed, the backgauge will advance ejecting the material to be cut, then automatically return to the position shown in the display.

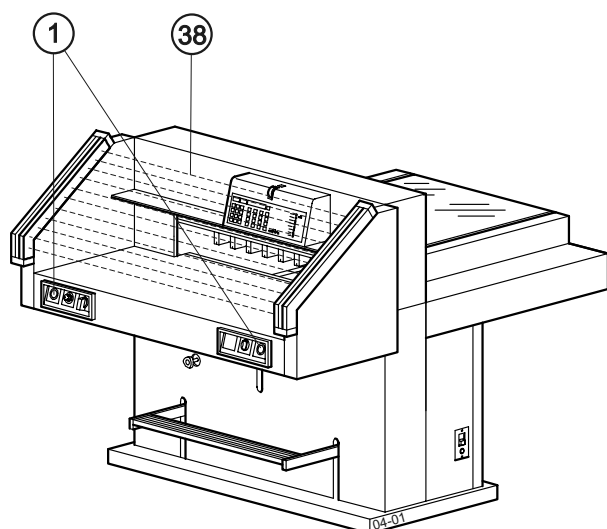


Multiple cuts function start

- Enter the cut size on the display.
- Press **[Start]** key.
- Push the paper to the backgauge.
- Release the cut.
- Press **[M]** key → the red „M“ (12) light will be on.
- Enter the constant cut size.
- Press **[Start]** key.
→ the backgauge will advance by the constant cut size.

Exiting program-mode

- Press **[M]** key → LED „M“ (12) switch OFF, The actual size is shown.



3.3 Cutting activation



Danger!

Do not reach into the cutting area when the blade is in motion.

A cut can only be activated when the specified size is approached. The LED „S“ on the display must be deleted and the safety area (38) free.

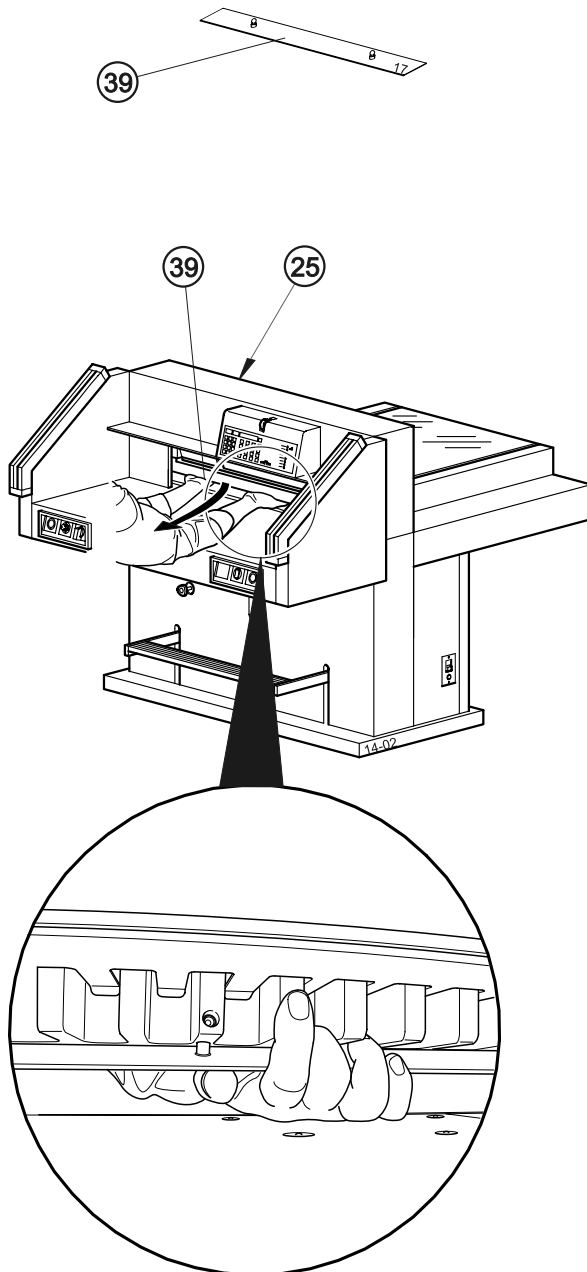
- Press both buttons of the safety two-handed control system (1) simultaneously and keep them pressed until the paper is completely cut.

Cutting stop or interruption:

- Release one or both buttons of the two-hand control (1).

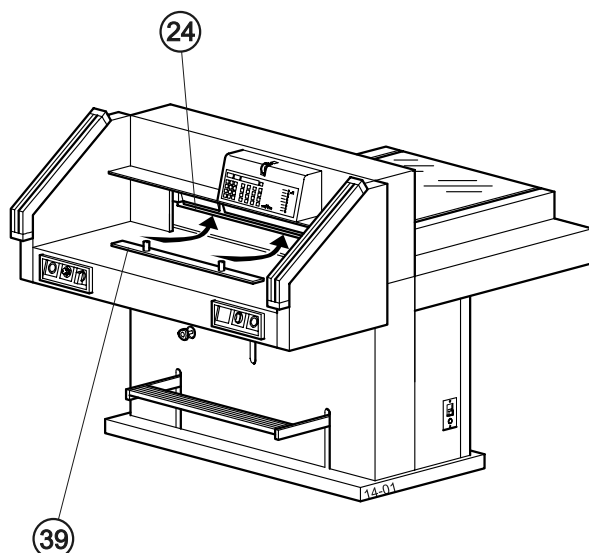
3.4 False clamp plate

A cover plate (39) can be fitted to prevent pressure marks on sensitive material.



To dismount:

- Remove the clamp plate (39) by pulling it down
- Store the clamp plate in the provided holder (25)
→ The remaining cut is 2 cm.



To mount:

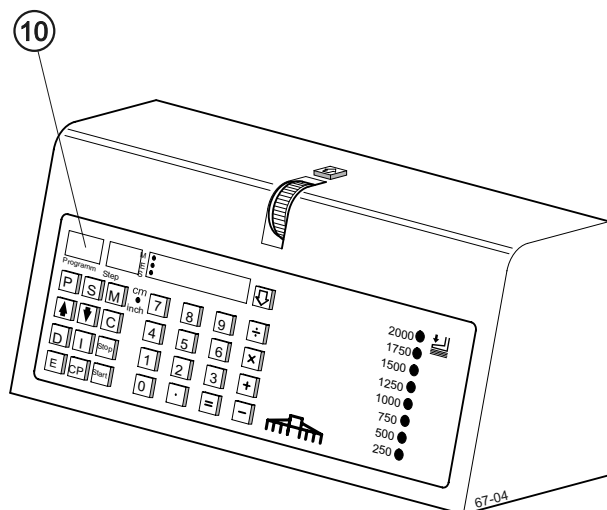
- The clamp plate (39) is inserted to the top into the clamp (24) → The remaining cut is 9 cm

3.5 Programming

The control system enables 20 programs with up to 16 steps to be programmed. One step represents one measurement or max. 9 chain measurements.

- P** Program
- S** Step
- M** Memory
- ↑** Program up
- ↓** Program down
- C** Clear
- D** Delete
- I** Insert
- E** Eject
- CP** Clear Program

Each program step corresponds to one dimension. The indicated program step can be overwritten at any time. These programs remain stored when the machine is off. Should you change to another dimension unit all programmed measures are converted into the new unit (cm and inch).



Program entry:

- Press **P** → the red „S“ light will be on.
- Enter desired program number **0 1 ... 2 0**. → The number will be shown in the display (10).
- Press the button **CP** twice → previous program is deleted.
- Enter the position.
- Confirm with **=**.
- **↑** choose the next step.
- Enter the next position
- Confirm with **=**
- **P** **Stop** Exiting program-mode.

Eject function

This function can only be programmed to one position.

- Press **E** **=** .

Select Program

- Press **P** → the red „S“ light will be on.
- Enter desired program number **0 1...2 0**.
- Press **S**
- Enter step number **0 1...1 6**.
- Or enter the next program step with key **↑** or **↓**.

Insert a step

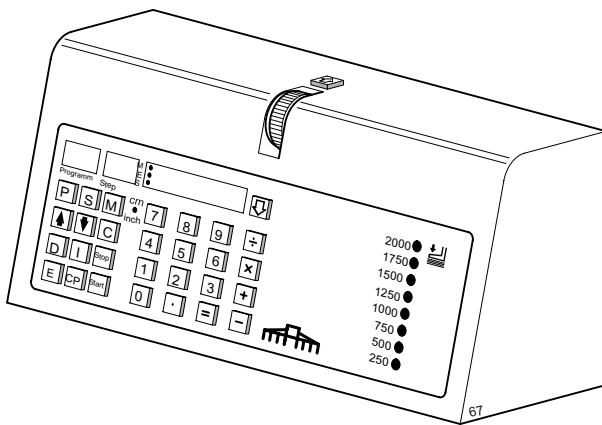
- Choose a step number with key **↑** or **↓**
- Press key **I**.
- Enter size.
- Press key **=**.

Delete a step

- Choose a step number with key **↑** or **↓**
- Press key **D** twice

Delete a program

- Enter desired program number **0 1...1 6**.
- Press key **CP** twice

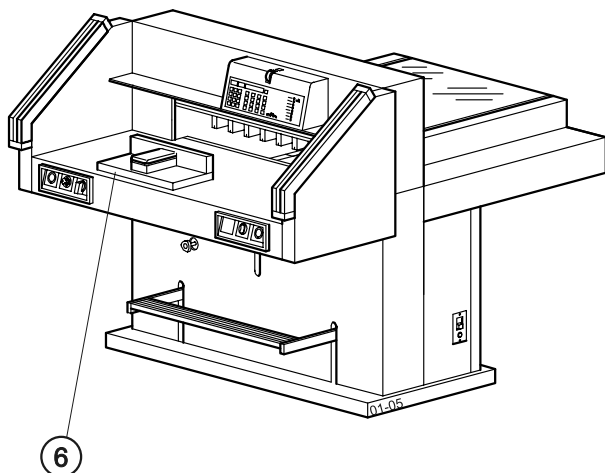


Example of a program

- **P 0 8** program 08
- **1 9 =** step 1 on 19,0cm
- **↑ 1 7 =** step 2 on 17,0cm
- **E =** eject
- **P (Stop)** Exiting program-mode.

How the example works

- **P 0 8** start program 08
- **(Start)** proceed to position
- Insert paper
- Release cut 1
- Release cut 2
- **P (Stop)** Exiting program-mode.



Working with programs

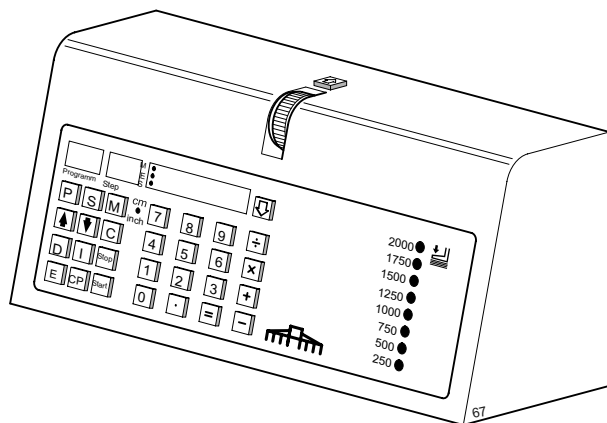
- Press **P**.
- Enter desired program number **0 1 ... 1 6**.
- Press **Start** → proceeds to position.
- Insert the paper and push it with the knocking-up block (6) to the backgauge.
- Release the cut. → After every cut the backgauge advances to the next position.

The cutting mechanism is described under No. 3. Operation.

Press key **↓** and **↑** to proceed to the desired program.

With **Start** the backgauge proceeds to position.

With **Stop** the backgauge stops.



General

The red „S“ light is on → specified size not achieved.

The red „S“ is off → specified size achieved.

Stop key is pressed - Backgauge stops and the actual size is shown.

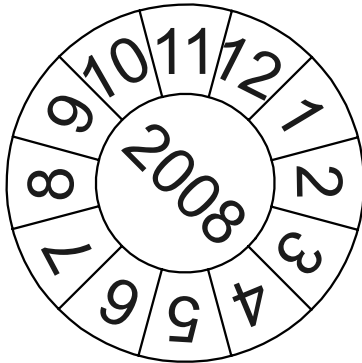
Exiting program-mode.

Press **P** **Stop**.

4. Maintenance

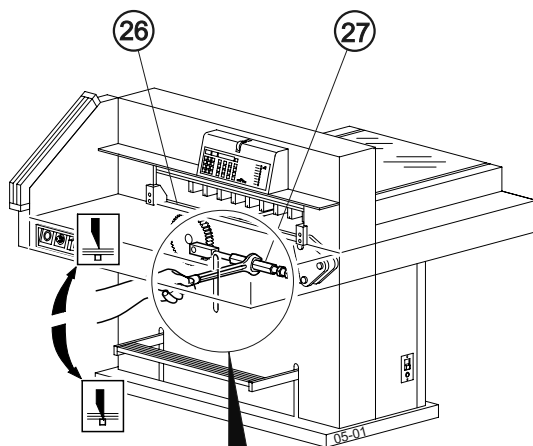
Danger!

- Maintenance work may only be performed by trained staff.
- Before replacing the blade or cutting stick switch off the main switch.
- **Disconnect from the mains before starting any service work or before removing the cover.**



Safety check

According to § 40 VBG 7i a safety check according to the safety stipulations has to be made every 5 years by a service team authorised through our service department. The carrying-out of such a check has to be attested on the test certificate. A corresponding test label has to be affixed on the back of the machine. In Germany such a safety check is regulated and we recommend it for all other countries, too.



4.1 Cutting stick

If the last sheet of paper is not completely cut, the cutting depth must be adjusted.

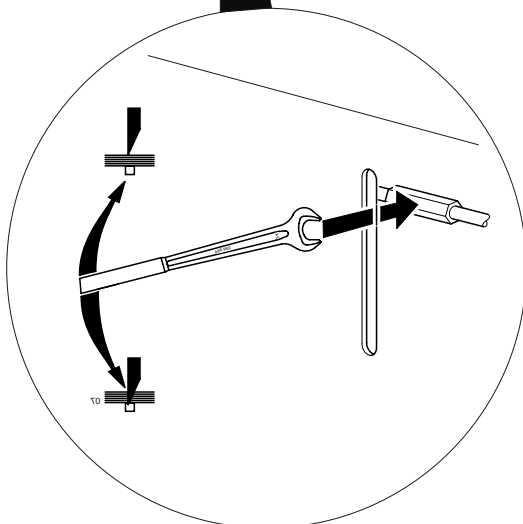
Setting the cutting depth

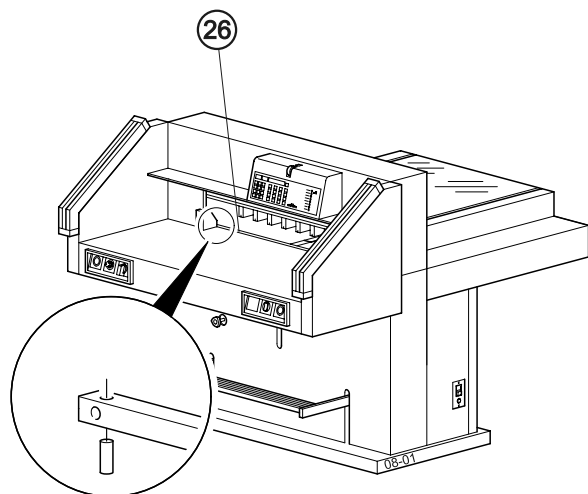
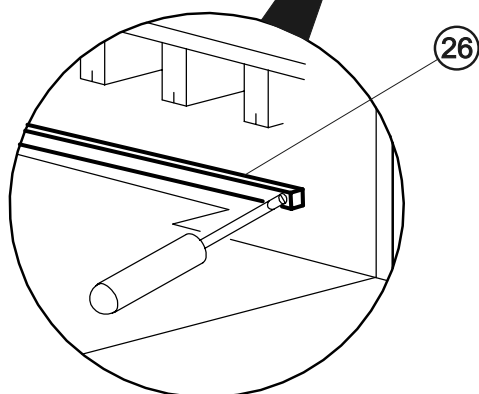
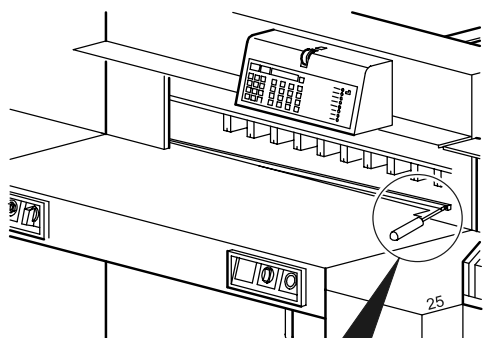
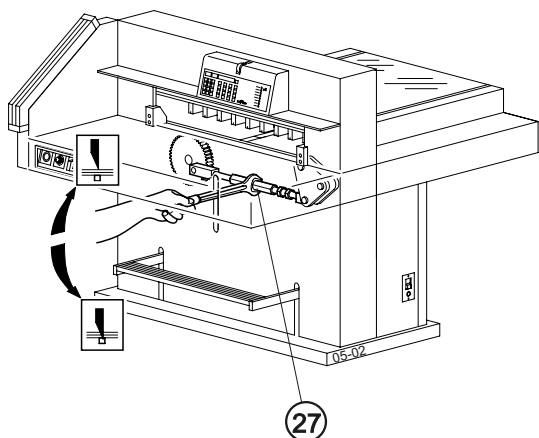
- Lower the blade depth adjustment (27) 1/12 using a spanner.
- Remove spanner.
- Perform cutting test as described below.

If the cutting stick (26) is very worn it must be turned.

Warning!

Do not cut into the cutting stick too deep as this shortens the life time of the blade.





Turning or replacing the cutting stick

- Turn the blade depth adjustment (27) to the top until it stops (spanner in tool set).
- Remove spanner.

⚠ Danger! Risk of injury!

- Remove the cutting stick (26) with a small screwdriver.
- Turn the cutting stick (the non-used side must be near to the blade) and plug it into the holding bolt. The cutting stick can be used eight times.
- Place the paper onto the whole width of the cutting area.
- Lower the blade by pressing both cut keys. Keep one button pressed and turn off the main switch.
- Lower the blade depth adjustment (27) until the paper is cut along the entire length.
- Remove spanner.
- Turn main switch to position „I“.

Cutting test

- If the last sheet of paper is not completely cut, lower the blade adjustment (27) 1/12 using a spanner.
- Remove spanner.
- Repeat this procedure until the paper is cut along the entire length.

4.2 Blade replacement

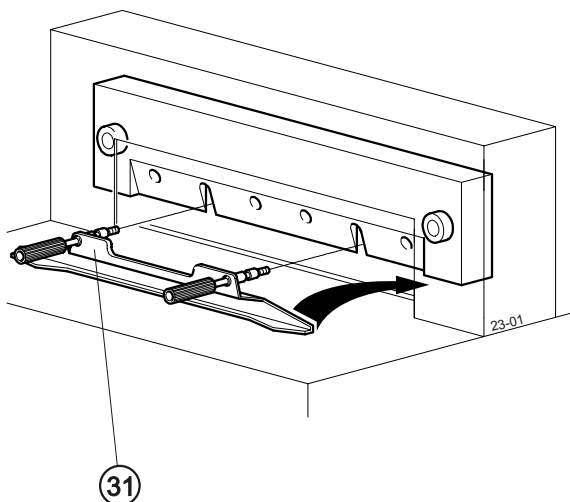
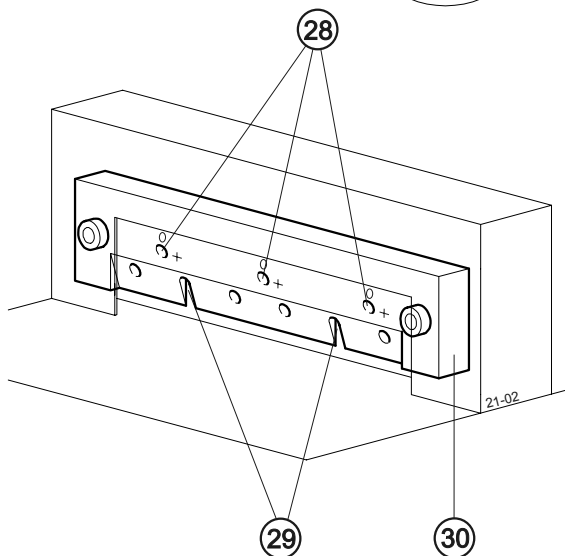
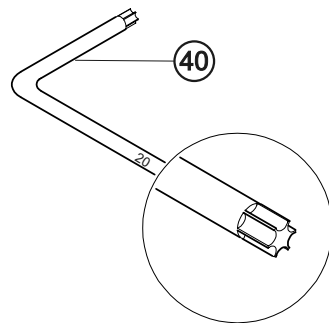
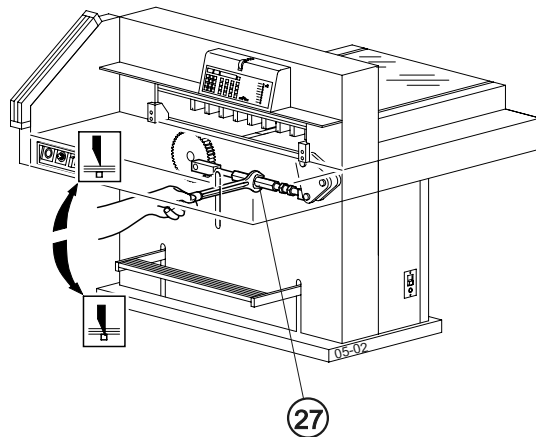
A reduction in the cutting quality indicates that the blade must be sharpened or a blade change is necessary.

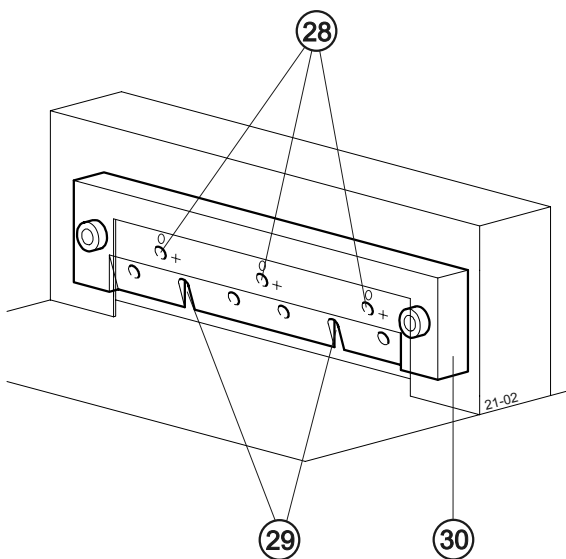
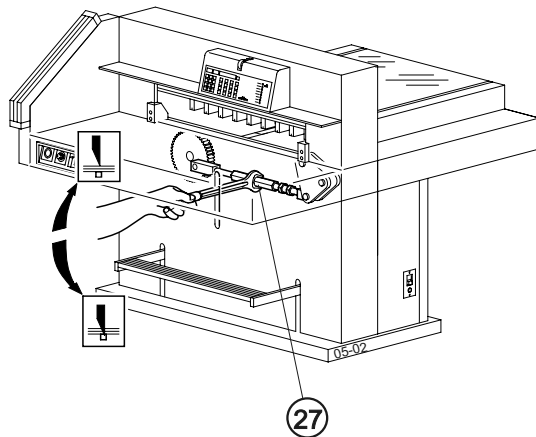
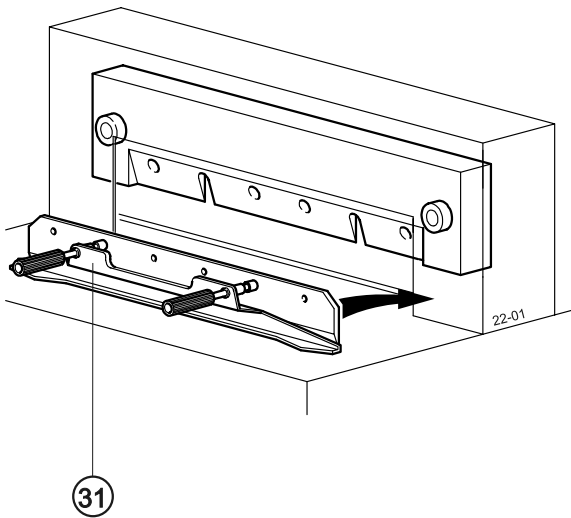
⚠ Danger! Risk of injury!

- The blade is extremely sharp. Do not remove or transport the blade without protection.
- Blade replacement work may only be performed by trained staff.

Removing the blade

- Turn the blade depth adjustment (27) to the top until it stops (spanner in tool set).
- Remove spanner.
- Lower the blade by pressing both cut buttons. Keep one button pressed and turn off the main switch.
- The eccentrics (28) are now exposed and should be turned to position "0". The special wrench (40) found in the tool set.
- Turn main switch to position „I“.
- Wait until the blade is at the top.
- Turn main switch to position „O“.
- Remove the 2 blade screws (29).
- Put the blade changing tool (31) into place and fasten it to the blade.
- The remaining screws should then be removed.
- Loosen the grips of the blade changing tool (31) lightly.
- Allow the blade to be taken downwards out of the machine.
- Place the blade into the blade carrier and screw it into place.





Blade mounting

- Turn resp. replace cutting stick → see „Cutting stick replacement“.
- Place the blade to be exchanged with the blade changing tool (31) mounted, into the blade carrier (30) up to the top and screw it into place with the grips.
- Lightly tighten 4 of the 6 blade screws (29) (with washers).
- Remove the blade changing tool.
- Lightly tighten the remaining blade screws (with washers) (2).
- Remove all tools and position a sheet of paper along the entire cutting length.
- Lower the blade by pressing both cut buttons. Keep one button pressed and turn off the main switch.
- Lower the blade depth adjustment (27) until the blade touches the paper.
- The 3 eccentrics (28) should then be used to lower the blade until the paper is cut along the entire length of the blade → (The blade must remain parallel to the cutting stick).
- Turn main switch to position „I“.
- The blade will return to the upper position and the blade screws should be tightened firmly.
- Cut a stack of paper to test.

⚠ Warning!

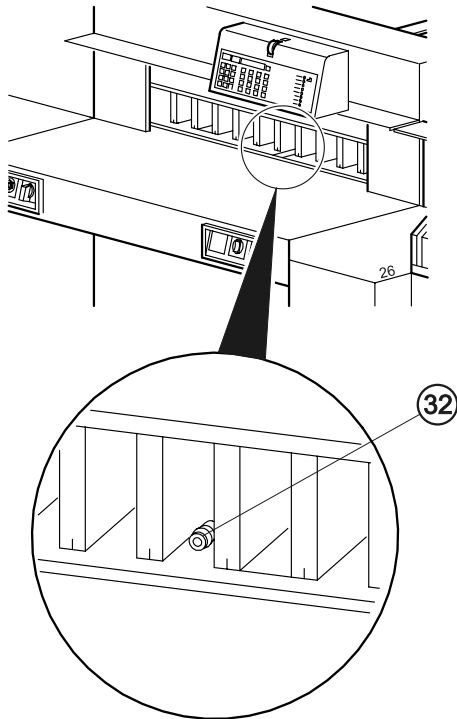
Blades may only be sharpened by a specialist.

4.3 Weekly Maintenance

- The backgauge should be advanced.
- Lubricate the grease nipple (32).

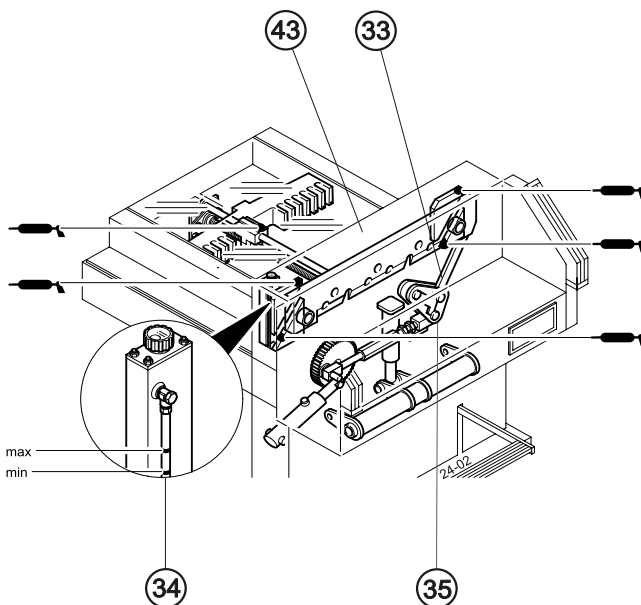
Type of grease

- Roller bearing grease - all types.



4.4 Monthly Maintenance

- Turn main switch off.
- Disconnect from the mains.
- Remove the front upper housing (43) → taking care of the cable.
- Check oil (34). If oil is below minimum contact your dealer.
- Remove paper debris.
- Lubricate all grease nipples.
- Check the joint bolts (35) if they are worn.
- Check connecting rod (33) if it is worn.
- Reassemble the machine.



Type of grease

- Roller bearing grease - all types.

5. Malfunctions



Danger!

Disconnect from the mains before starting any service work or before removing the cover.

Malfunction:

No display.

Cause:

Power supply.

Remedy:

- Plug in to the mains.
- Mains switch on.
- Check on-site fuse.
- Overload switch green (36) pressed.

Malfunction:

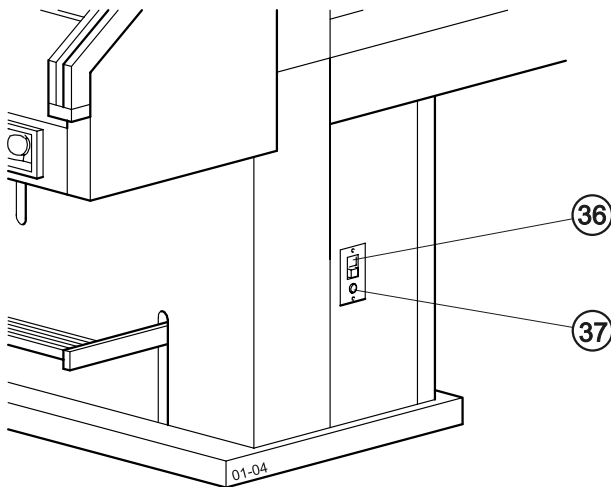
Optical cutting line indicator does not function after the machine has been moved to another position.

Cause:

Phase direction wrong.

Remedy:

See „Installation and, Power supply“.



Malfunction:

Backgauge does not function.

Cause:

Motor is overloaded.

Remedy:

Press safety switch (37).

Malfunction:

Cut cannot be activated.

a) Cause:

Safety light beam is interrupted / dirty?

Remedy:

Remove any items and clean the sender.

b) Cause:

Backgauge does not go to the correct position.

→ the red „S“ light is on.

Remedy:

Press **(Start)** again.

c) Cause:

Size under 9 cm.

Remedy:

Put the false clamp in the provided holder.

Malfunction:

Machine is switched on but cut cannot be performed.

Cause:

Safety clutch is activated.

Remedy:

Contact your dealer.

Malfunction:

The last sheet of paper is not completely cut.

Remedy:

Adjust the cutting depth (see Cutting stick) or replace or turn the cutting stick.

Malfunction:

Poor cutting quality or blade jams.

Remedy:

Blade change or adjustment is necessary.

Malfunction:

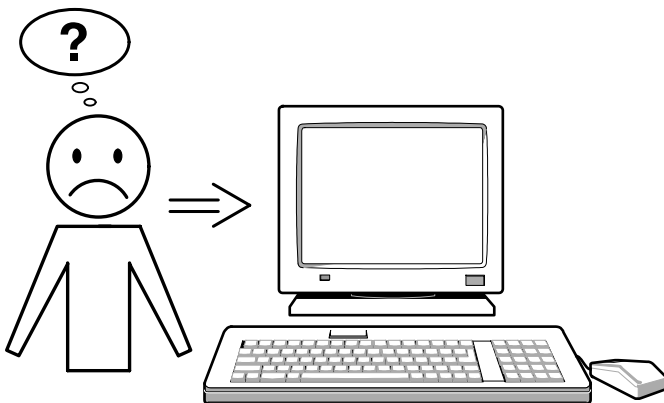
No clamp pressure

Cause:

Hydraulic oil needs refilling

Remedy:

Contact your dealer.



If you have further questions please contact your dealer or directly on the internet **service@krug-priester.com**

Subject to alteration without notice

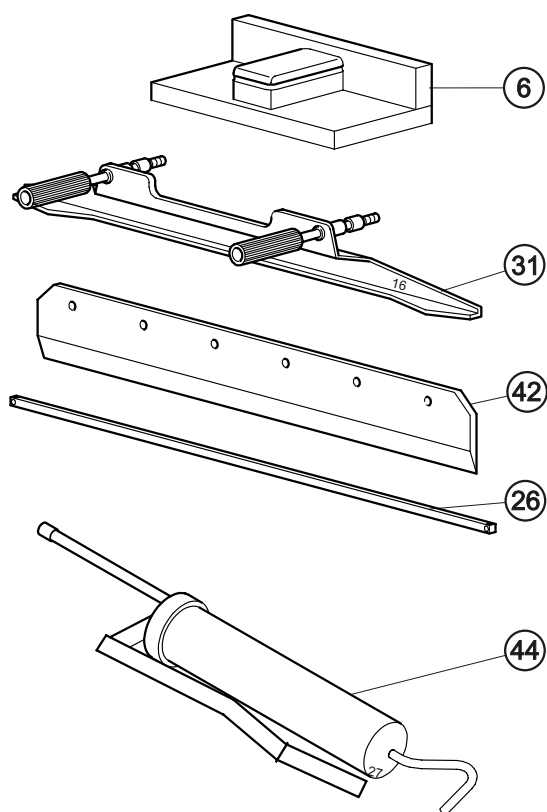
6. Technical data

Sound level DIN 45635-27:	max. 73 dB(A)
Minimum space requirement B x T:	
without side tables	130 cm x 151 cm
with side tables	210 cm x 160 cm
Clamping pressure	250 dN bis 2000 dN
Weight without side tables:	584 kg
Weight with side tables:	620 kg
Capacity of hydraulic oil	
Shell Tellus C32 or similar	1,5 l
Used oil must be disposed of at the authorized place.	

The exact technical specifications can be found on the technical specifications sticker on the machine.

Safety light beam

Total reaction time of safety device:	95 ms
Resolution top	20 mm; 30 mm
Resolution front	40 mm
Distance:	238 mm; 20 mm
Distance:	318 mm; 30 mm
Distance:	460 mm; 40 mm



7. Accessories



Attention!

Only use accessories recommended by the manufacturer.

Not all of the accessories illustrated or described are included as standard delivery.

Knocking-up block (6)	9000 521
Blade change set (31)	9000 514
HSS - Blade (42)	9000 141
6 Cutting sticks (26)	9000 039
Side tables left and right	9000 550
Grease gun (44)	9004 683

EG-KONFORMITÄTSERKLÄRUNG

EC-declaration of conformity

Déclaration de conformité CE

Declaración CE de conformidad

Dichiarazione CE di conformità

EG-verklaring van overeenstemming

Declaração CE de conformidade

EF-overensstemmelseserklæring

- Hiermit erklären wir, daß die Bauart von

- Herewith we declare that

- Par la présente, nous déclarons que

- Por la presente, declaramos que la

- Si dichiara che il modello della

- Hiermede verklaren wij, dat de in de handel gebrachte machine

- Com a presente, declaramos que o modelo da

- Hermed erklæres, at produkttypen

721; 721 LT

- folgenden einschlägigen Bestimmungen entspricht:

- complies with the following provisions applying to it:

- sont conformes aux dispositions pertinentes suivantes:

- satisface las disposiciones pertinentes siguientes:

- è conforme alle seguenti disposizioni pertinenti:

- voldoet aan de eisen van de in het vervolg genoemde bepalingen:

- está em conformidade com as disposições pertinentes, a saber:

- er i overensstemmelse med følgende bestemmelser:

EG98-37; EG73/23; EG89/336

- Angewendete harmonisierte Normen insbesondere

- Applied harmonized standards in particular

- Normes harmonisées utilisées, notamment

- Normas armonizadas utilizadas particularmente

- Norme armonizzate applicate in particolare

- Gebruikte geharmoniseerde normen, in het bijzondere

- Normas harmonizadas utilizadas, em particular

- Harmoniserede standarder, der blev anvendt, i særdaleshed

EN60204; prEN1010-1; prEN1010-3; EN55014-1; EN55014-2;

EN61000-3-2; EN61000-3-3; prEN50100-1; prEN50100-2;

EN292; EN294 EN27779; EN349; DIN45635-27

Krug & Priester GmbH u. Co KG
72336 Balingen, Germany

28. 8. 2002
Datum

W. Priester
Wolfgang Priester
- General Manager -



